

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

November 23, 2007

APPEAL BRIEF

for

Appl. No.	:	09/964,590
First Named Inventor	:	MOHAMED, Abdulahi
Filing Date	:	September 28, 2001
Priority Date	:	September 28, 2000
Title	:	ELECTRONIC DISPLAY WITH MULTIPLE PRE-PROGRAMMED MESSAGES
Art Unit	:	2612
Examiner	:	LU, Shirley
Docket No.	:	50035-001
Attorney/Agent	:	Otto Zsigmond, Reg. No. 56312

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Real party in interest	3
Related appeals and interferences	4
Status of claims	5
Status of amendments	6
Summary of claimed subject matter	7
Grounds of rejection to be reviewed on appeal	11
Arguments in favor of patentability	12
Claims appendix	25
Evidence appendix	28
Related proceedings appendix	29

REAL PARTY IN INTEREST

The real party in interest in respect of this appeal brief is: Abdulahi Mohamed.

RELATED APPEALS AND INTERFERENCES

None.

STATUS OF CLAIMS

The status of the claims in this application is:

<u>Claim</u>	<u>Status</u>	<u>APPEALED / Not appealed</u>
1-15	withdrawn	Not appealed
16-18	rejected	APPEALED
19	objected to and allowable	Not appealed
20-27	rejected	APPEALED
28	objected to and allowable	Not appealed
29	rejected	APPEALED

STATUS OF AMENDMENTS

The status of any amendment filed subsequent to final rejection, as understood by the appellant, is as follows:

None.

SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in each of the independent claims and separately argued dependent claims involved in the appeal, referring to examples of claimed features described in the specification within square brackets by page and line number, and to drawing(s), if any, by reference character, including identifying each claimed means plus function and step plus function and setting forth with reference to the specification by page and line number, and to drawing(s), if any, by reference character, the structure, material or acts described in the specification as corresponding to each claimed function, is provided as follows.

In the concise explanation provided herein below, a reference to reference characters shown in drawings includes references to the drawings showing such reference characters, and a reference to a page (p.) and line (ln.) number includes references to text near to and surrounding the referenced page (p.) and line (ln.) number.

Independent claim 16

Claim 16 recites a device [e.g. *display sign 10* (p. 3, ln. 26-27; p. 4, ln. 17). *display sign 60* (p. 5, ln. 11-13 and 30). p. 5, ln. 33 to p. 6, ln. 24. *display sign 100* (p. 7, ln. 1-3).] for displaying multiple pre-programmed messages [e.g. p. 4, ln. 2-9; p. 5, ln. 24-28; p. 6, ln. 9-13, 23-24; p. 7, ln. 10-11; p. 8, ln. 1, 8, 19-20. *Figures 1, 3, 6-9, 13-14, 17-18*], comprising:

a first housing [e.g. *housing 12* (p. 3, ln. 28; p. 4, ln. 22, 30-34). *housing 82* (p. 6, ln. 1 and 3). *housing or unit 106* (p. 7, ln. 4-5, 14, 16 and 25; p. 8, ln. 2, 13 and 15).] adapted to be mounted in a first location [e.g. *hotel room door 30* (p. 4, ln. 10, 12, 31, 34). *washroom door* (p. 4, ln. 6). *retail store window* (p. 5, ln. 11-16). *roof of taxi 80* (p. 6, ln. 3). p. 6, ln. 20-24.], a first electronic display mounted in the first housing [e.g. *electronic display panel 14* (p. 3, ln. 28, 33). *front display panel 81* and *rear display panel 83* (p. 6, ln. 1-7). *display panel 114* (p. 7, ln. 5-9, 32-33; p. 8, ln. 1-2 and 17). *small LCD display* (p. 8, ln. 4-5).], a first microprocessor [e.g. *CPU₁*, 42 (p. 6, ln. 26-33); *Figure 16*. See also in association with *printed circuit board 120* (p. 7, ln. 17); *Figure 20*.] associated with the first housing and being operably connected to the first

electronic display for communicating display instructions to the first electronic display to generate a viewable message based on a selected message signal [e.g. p. 2, *ln.* 13-14; p. 6, *ln.* 26-33];

a second housing [e.g. *housing* 12 (p. 3, *ln.* 28; p. 4, *ln.* 22, 30-34). *control housing* 88 (p. 6, *ln.* 4). *housing or unit* 104 (p. 7, *ln.* 4-5, 14, 19, 29, 31 and 34; p. 8, *ln.* 3, 6, 9, 13 and 15). *remote control device* (p. 8, *ln.* 2-4).] adapted to be mounted in a second location [e.g. p. 4, *ln.* 30-34. *adjacent the taxi* (80) *driver* (p. 6, *ln.* 4). p. 6, *ln.* 20-24.], a second electronic display mounted in said second housing [e.g. *display screen* 22 (p. 3, *ln.* 34 to p. 4, *ln.* 2). *display screen* 87 (p. 6, *ln.* 5). *display panel* 114 (p. 7, *ln.* 5-9, 32-33).], a second microprocessor [e.g. *CPU*, 42 (p. 6, *ln.* 26-33). *See also in association with printed circuit board* 120 (p. 7, *ln.* 19); *Figure* 20.] associated with the second housing [e.g. p. 2, *ln.* 14-15; p. 6, *ln.* 26-33.] and having a plurality of programmed message signals [e.g. p. 6, *ln.* 28.], means for conducting electric signals between the first microprocessor and the second microprocessor such that the second microprocessor is operably connected to the first microprocessor for communicating the selected message signal to the first microprocessor [e.g. p. 2, *ln.* 18-19; p. 6, *ln.* 3-4; p. 7, *ln.* 20-22; p. 8, *ln.* 12-15.], the second microprocessor further being operably connected to the second electronic display [e.g. p. 2, *ln.* 14-15. p. 6, *ln.* 26-33.] for communicating display instructions to the second electronic display [e.g. p. 2, *ln.* 14-15. p. 6, *ln.* 26-33.] to generate a viewable message [e.g. p. 2, *ln.* 14-15. p. 6, *ln.* 26-33.] based on the selected message signal [e.g. p. 2, *ln.* 14-15. p. 6, *ln.* 26-33.];

message selection means associated with the second housing and being operably connected to the second microprocessor for enabling a user to select from the plurality of programmed message signals [e.g. p. 3, *ln.* 31 to p. 4, *ln.* 1; p. 4, *ln.* 7-9, 13-15, 26-28; p. 5, *ln.* 1-6, 21-30; p. 6, *ln.* 5-7, 12-20, p. 8, *ln.* 4-6, 18-20; *Figures* 2, 4, 7, 10, 12, 14, 16.], the second microprocessor communicating the selected message signal to the second electronic display to generate the viewable message [e.g. p. 2, *ln.* 14-15. *message* 16 (p. 4, *ln.* 26-28). p. 6, *ln.* 26-33.] and further communicating the selected message signal to the first microprocessor [e.g. p. 4, *ln.* 26-28, 33-34; p. 5, *ln.* 1-10; p. 5, *ln.* 33 to p. 6, *ln.* 7; p. 6, *ln.* 18-19; p. 7, *ln.* 28-32.]; and

a source of electricity associated with one of said first or second housings for supplying electric power to the device [e.g. *9 volt battery* 44 (p. 4, *ln.* 24); *120V AC power* (p. 4, *ln.* 25); *solar cell* 33 (p. 4, *ln.* 26). *plug-in* 96 (p. 6, *ln.* 8-9). *battery* 124 (p. 7, *ln.* 16-22).].

By way of further summary of the features recited in claim 16, the specification at page 6, lines 26-33 describes *CPU*, 42 mounted within *housing* 12, with reference to Figure 16. After introducing a *housing* 12 at page 3, line 28, the specification at page 4, lines 30-34 describes an embodiment using two separate housings with reference to Figures 1 and 2. Further examples of multiple housings are also described in the specification in respect of housings 104 and 106.

Additionally, the examples provided herein in relation to the first microprocessor and the first display may be interchanged with the examples provided herein in relation to the second microprocessor and the second display. For example, the specification at page 5, lines 1-10 describes use of the invention to permit persons to leave a message for an occupant. Such description is in addition to the descriptions in the specification related to the occupant leaving a message for other persons. Thus, the examples provided herein in relation to the first microprocessor and the first display may be interchanged with the examples provided herein in relation to the second microprocessor and the second display.

Independent claim 26

Claim 26 recites a device [e.g. *display sign* 10 (p. 3, ln. 26-27; p. 4, ln. 17). *display sign* 60 (p. 5, ln. 11-13 and 30). p. 5, ln. 33 to p. 6, ln. 24. *display sign* 100 (p. 7, ln. 1-3).] for displaying multiple pre-programmed messages [e.g. p. 4, ln. 2-9; p. 5, ln. 24-28; p. 6, ln. 9-13, 23-24; p. 7, ln. 10-11; p. 8, ln. 1, 8, 19-20], comprising:

a first housing [e.g. *housing* 12 (p. 3, ln. 28; p. 4, ln. 22, 30-34). *housing* 82 (p. 6, ln. 1 and 3). *housing or unit* 106 (p. 7, ln. 4-5, 14, 16 and 25; p. 8, ln. 2, 13 and 15).] adapted to be mounted in a first location [e.g. *hotel room door* 30 (p. 4, ln. 10, 12, 31, 34). *washroom door* (p. 4, ln. 6). *retail store window* (p. 5, ln. 11-16). *roof of taxi* 80 (p. 6, ln. 3). p. 6, ln. 20-24.];

a first electronic display screen mounted in said first housing [e.g. *electronic display panel* 14 (p. 3, ln. 28, 33). *front display panel* 81 and *rear display panel* 83 (p. 6, ln. 1-7). *display panel* 114 (p. 7, ln. 5-9, 32-33; p. 8, ln. 1-2 and 17). *small LCD display* (p. 8, ln. 4-5).];

a second housing [e.g. *housing* 12 (p. 3, ln. 28; p. 4, ln. 22, 30-34). *control housing* 88 (p. 6, ln. 4). *housing or unit* 104 (p. 7, ln. 4-5, 14, 19, 29, 31 and 34; p. 8, ln. 3, 6, 9, 13 and 15). *remote control device* (p. 8, ln. 2-4).] adapted to be mounted in a second location [e.g. p. 4, ln. 30-34.

adjacent the taxi (80) driver (p. 6, ln. 4). p. 6, ln. 20-24.];
a second electronic display screen mounted in said second housing [e.g. *display screen 22 (p. 3, ln. 34 to p. 4, ln. 2). display screen 87 (p. 6, ln. 5). display panel 114 (p. 7, ln. 5-9, 32-33).];*
a first microprocessor [e.g. *CPU, 42 (p. 6, ln. 26-33); Figure 16. See also in association with printed circuit board 120 (p. 7, ln. 17); Figure 20.*] for providing display information to said display screen in said first housing [e.g. *p. 2, ln. 13-14; p. 6, ln. 26-33.];*
a second microprocessor [e.g. *CPU, 42 (p. 6, ln. 26-33). See also in association with printed circuit board 120 (p. 7, ln. 16-22). Figure 20.*] for providing display information to said display screen in said second housing [e.g. *p. 2, ln. 14-15; p. 6, ln. 26-33.];*
a power source in one of said first or second housings for supplying electric power to said display screens and said first and second microprocessors [e.g. *9 volt battery 44 (p. 4, ln. 24); 120V AC power (p. 4, ln. 25); solar cell 33 (p. 4, ln. 26). plug-in 96 (p. 6, ln. 8-9). battery 124 (p. 7, ln. 16-22).];*
means for selecting a message to be displayed on said first and second displays [e.g. *p. 3, ln. 31 to p. 4, ln. 1; p. 4, ln. 7-9, 13-15, 26-28; p. 5, ln. 1-6, 21-30; p. 6, ln. 5-7, 12-20, p. 8, ln. 4-6, 18-20; Figures 2, 4, 7, 10, 12, 14, 16.]; and*
means for conducting electric signals between said first and second microprocessors [e.g. *p. 4, ln. 26-28, 33-34; p. 5, ln. 1-10; p. 6, ln. 3-4, 18-19; p. 7, ln. 20-22 and 28-32.].*

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Concise statements of each ground of rejection in the final Office action of March 21, 2007 to be reviewed on appeal are grouped as follows:

1. Claims 16-18, 20, 26-27 and 29 are rejected under **35 U.S.C. § 103(a)** as being unpatentable over **Wagner et al.** (US 6,236,303). Applicant notes that the listing of claims in the heading of the final Office action referring to this ground of rejection lists claim 28 and not claim 29. However, the substantive arguments presented by the Examiner under this ground of rejection and the objections to claim 28 elsewhere in the final Office action appear to suggest that claim 29, and not claim 28, is rejected under this ground.
2. Claim 21 is rejected under **35 U.S.C. § 103(a)** as being unpatentable over **Wagner et al.** (US 6,236,303) in view of **Herz et al.** (US20060069749).
3. Claims 22-25 are rejected under **35 U.S.C. § 103(a)** as being unpatentable over **Wagner et al.** (US 6,236,303) in view of **Morris** (US 6,768,424).

The claims to be reviewed on appeal do not stand or fall together, but will be argued separately in accordance with the foregoing groups.

ARGUMENTS IN FAVOUR OF PATENTABILITY

Arguments in favour of patentability with respect to each ground of rejection are provided as follows.

1. Rejections under 35 U.S.C. 103(a) over Wagner et al. (US 6,236,303)

Claim 16 (independent claim)

Applicant respectfully submits that Wagner et al. fails to disclose or suggest the claimed features of the invention defined by claim 16, and that a *prima facie* case of obviousness has not been established.

For example, Applicant respectfully submits that Wagner et al. fails to disclose or suggest means for conducting electric signals between the first microprocessor and the second microprocessor such that the second microprocessor is operably connected to the first microprocessor for communicating the selected message signal to the first microprocessor, ...the second microprocessor ...communicating the selected message signal to the first microprocessor (the "Dual Microprocessor Communication Feature"), as recited in claim 16.

Wagner et al. discloses a system which replaces conventional signs such as "do not disturb" and "maid service" or "housekeeping" used for hotel guestrooms. The system includes a switch assembly allowing a hotel guest to choose between switch positions, and an indicating assembly connected to the switch assembly. The indicating assembly includes indicators that relate to switch assembly positions. In a preferred embodiment, the indicators comprise a plurality of lights, such that when the switch is switched to a first "on" position, one of the indicator lights turns on, indicating a certain status of the room. In addition to or in place of lights, audio signals or an LCD display could be used to indicate different messages desired to be conveyed by the guest or by the hotel staff.

Wagner et al. discloses at column 5, lines 20-24 that in order to control features of the invention, a microprocessor 52 may be provided, for example to control electronic push button/membrane switches, operation of the plurality of lights, including blinking lights, remote switching and actuation, and the security/alarm feature described in Wagner et al.

Thus, Applicant respectfully submits that Wagner et al. discloses that a microprocessor can be used to control features of the system of Wagner et al. such as switches, lights, remote switching and actuation, and security or alarm features. Wagner et al., does not, however, disclose dual or multiple microprocessors. In fact, the Examiner admits in the final Office action at page 3, line 6 that Wagner et al. "does not explicitly show two microprocessors". Moreover, Applicant respectfully submits that Wagner et al. does not disclose, nor suggests, communications between two microprocessors, or anything like communications between two microprocessors. Furthermore, Applicant respectfully submits that Wagner et al. fails to disclose or suggest the Dual Microprocessor Communication Feature recited in claim 16.

Applicant respectfully submits that the inventors Wagner et al., given the limited disclosure of their patent, failed to appreciate the unexpected advantages of the invention defined by claim 16, including enhanced flexibility in the use of microprocessing resources differentially allocated between communication and control functions, and enhanced flexibility, security and reliability of communications where communication is occurring between two microprocessors.

Applicant's invention defined by claim 16 includes first and second microprocessors, each of which control respective features (e.g. display panels 14, 81, 83, 114; display screens 22, 87; message selection means). Additionally and separately from control functions, the first and second microprocessors communicate with each other to effect features of the invention. This is in sharp contrast to the system of Wagner et al. where a microprocessor might be used to control switches, lights, remote switching and actuation, and security or alarm features.

The Manual of Patent Examining Procedure (MPEP) provides the following in section 2142:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First,

there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicant respectfully submits that none of the three basic criteria for establishing a *prima facie* case of obviousness have been met.

In respect of the first criterion, Applicant respectfully submits that Wagner et al. fails to provide any suggestion or motivation to modify the system of Wagner et al. to arrive at the invention recited in claim 16.

While the Examiner states in the final Office action that the "system could be made of more than one processor chip, to suit design needs such as cost, ease of repair and maintenance", Applicant respectfully submits that no such motivation is found in Wagner et al. Furthermore, it is unclear from the final Office action how adding one or more additional processor chips would suit design needs such as cost, ease of repair and maintenance. Also, Applicant respectfully submits that even if the system of Wagner et al. were modified to add one or more processor chips to control features of the system such as switches, lights, remote switching and actuation, and security or alarm features, no suggestion or motivation is provided in Wagner et al. to modify the system of Wagner et al. to arrive at the invention of claim 16, including the Dual Microprocessor Communication Feature.

The final Office action states it "would have been obvious to one of ordinary skill in the art to modify Wagner et al. to teach two microprocessors as claimed, as an obvious matter of design choice". In response, Applicant respectfully submits that such statement begs the question as to whether the invention of claim 16, including the two microprocessors as claimed, are properly rejected on the ground of obviousness. Applicant respectfully submits that the final Office action does not point to any suggestion or motivation in the cited art or the general knowledge of the person of ordinary skill in the art for modifying Wagner et al. to arrive at the invention of claim

16, including the Dual Microprocessor Communication Feature. Furthermore, Applicant respectfully submits that no such suggestion or motivation can be found in Wagner et al. and no pertinent general knowledge of the person of ordinary skill in the art is expressly cited in the final Office action.

The final Office action states that "[a]dditionally, at some point in time, an additional external microprocessor was used to program the second housing unit, in which both microprocessors would effectively be operably connected and communicating with each other". In response, Applicant respectfully submits that no basis for such statement can be found in Wagner et al. In fact, Applicant's application under appeal provides at page 6, lines 29-34 that:

"A message may be programmed in to CPU₁ for a particular button by inputting the appropriate program code from an external CPU₂ 43 which in turn is provided with the program code on a pre-programmed ROM chip 45, or which has been programmed onto a programmable ROM 47 by a program unit."

The teaching or suggestion to make the claimed combination must be found in the prior art, not in applicant's disclosure: *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Furthermore, Applicant respectfully submits that even if a statement, suggestion or motivation could be found in Wagner et al., or Wagner et al. in combination with common general knowledge of a person of ordinary skill in the art, as a basis for using an external microprocessor for programming, such statement, suggestion or motivation, when combined with the disclosure of Wagner et al., would not result in the invention of claim 16. Claim 16 expressly recites in part: "the second microprocessor is operably connected to the first microprocessor for communicating the selected message signal to the first microprocessor". Applicant respectfully submits that using an external microprocessor for programming during manufacturing does not disclose nor suggest communicating a message signal selected during operation subsequent to manufacturing. Thus, Applicant respectfully submits that reference to external programming did not and cannot form a proper basis for rejecting the invention of claim 16.

Applicant respectfully submits that the final Office action fails to point to any suggestion and/or motivation that can be found in Wagner et al., or Wagner et al. in combination with the knowledge generally available to one of ordinary skill in the art, to modify Wagner et al. to arrive at the Dual Microprocessor Communication Feature recited in claim 16, nor to arrive at the claimed invention of claim 16.

Thus, Applicant respectfully submits that the first criterion for establishing a *prima facie* case of obviousness has not been met.

In respect of the second criterion, Applicant respectfully submits that the final Office action fails to provide any basis for a reasonable expectation of success at arriving at the claimed invention of claim 16.

Applicant respectfully submits that Wagner et al. discloses that a microprocessor can be used to control features of the invention such as switches, lights, remote switching and actuation, and security or alarm features. Applicant respectfully submits that the disclosure of Wagner et al. is limited to a microprocessor that can be used to perform control functions, including the specific examples of control features cited in Wagner et al. Thus, Applicant respectfully submits that the limited disclosure of Wagner et al. provides no expectation of success at arriving at a second microprocessor ...operably connected to the first microprocessor for communicating the selected message signal to the first microprocessor, as recited in claim 16. Therefore, Applicant respectfully submits that Wagner et al. fails to provide a basis for a reasonable expectation of success at arriving at the Dual Microprocessor Communication Feature recited in claim 16.

Thus, Applicant respectfully submits that Wagner et al. fails to provide a basis for a reasonable expectation of success at arriving at the claimed invention of claim 16.

Furthermore, Applicant respectfully submits that the final Office action does not point to any basis in the general knowledge of the person of ordinary skill in the art for a reasonable expectation of success at arriving at the claimed invention of claim 16.

Consequently, Applicant respectfully submits that the final Office action fails to point to any basis that can be found in Wagner et al., or Wagner et al. in combination with the knowledge generally available to one of ordinary skill in the art, for a reasonable expectation of success at arriving at the claimed invention of claim 16.

Thus, Applicant respectfully submits that the second criterion for establishing a *prima facie* case of obviousness has not been met.

In respect of the third criterion, Applicant respectfully submits that the art cited in the final Office action fails to teach or suggest all the claim limitations of claim 16.

Applicant respectfully submits that Wagner et al. discloses that a microprocessor can be used to control features of the system of Wagner et al. such as switches, lights, remote switching and actuation, and security or alarm features. Applicant respectfully submits that the disclosure of Wagner et al. is limited to a microprocessor that can be used to perform control functions, including the specific examples of control features cited in Wagner et al. Thus, Applicant respectfully submits that the limited disclosure of Wagner et al. fails to disclose or suggest a second microprocessor ...operably connected to the first microprocessor for communicating the selected message signal to the first microprocessor, as recited in claim 16. Therefore, Applicant respectfully submits that Wagner et al. fails to disclose or suggest the Dual Microprocessor Communication Feature of claim 16.

Consequently, Applicant respectfully submits that Wagner et al. fails to disclose or suggest all the claim limitations of claim 16.

Furthermore, Applicant respectfully submits that the final Office action does not point to any general knowledge of the person of ordinary skill in the art disclosing or suggesting all the claim limitations of claim 16.

Thus, Applicant respectfully submits that the third criterion for establishing a *prima facie* case of

obviousness has not been met.

Consequently, Applicant respectfully submits that a *prima facie* case of obviousness has not been established in respect of claim 16.

Claims 17-18, 20 (dependent on claim 16)

Applicant respectfully submits that claims 17-18 and 20 should each be allowable due to their respective dependencies on claim 16, which has previously been shown to be allowable, and any additional subject matter recited therein.

Claim 26 (independent claim)

Applicant respectfully submits that Wagner et al. fails to disclose or suggest the claimed features of the invention defined by claim 26.

For example, Applicant respectfully submits that Wagner et al. fails to disclose or suggest means for conducting electric signals between said first and second microprocessors, as recited in claim 26.

Applicant respectfully submits that claim 26 must be interpreted in view of the specification without importing claim limitations from the specification. Also, when an element is claimed using language falling under the scope of 35 U.S.C. 112, 6th paragraph (e.g. "means for"), the specification must be consulted to determine the structure, material, or acts corresponding to the function recited in the claim. See *In re Donaldson*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994) in this regard. The Applicant respectfully submits that specification at p. 4, ln. 33-34; p. 6, ln. 3-4; and p. 7, ln. 20-22 provides support for the claim limitation recited in claim 26 of means for conducting electrical signals between said first and second microprocessor. Accompanying such claim support, the specification at p. 4, ln. 26-28; p. 5, ln. 1-10; p. 6, ln. 18-19; and p. 7, ln. 28-32 describes messages and their communication, including the communication of messages between said first and second microprocessors being operably

connected for such communication of messages between said first and second microprocessors by means for conducting electric signals between said first and second microprocessors. Thus, Applicant respectfully submits that the recited means for conducting electric signals between said first and second microprocessors, when interpreted in view of the specification without importing claims limitations from the specification, operably connects said first and second microprocessors to each other for communicating messages between said first and second microprocessors (the "Message Communication Between Microprocessors Feature").

Wagner et al. discloses a system which replaces conventional signs such as "do not disturb" and "maid service" or "housekeeping" used for hotel guestrooms. The system includes a switch assembly allowing a hotel guest to choose between switch positions, and an indicating assembly connected to the switch assembly. The indicating assembly includes indicators that relate to switch assembly positions. In a preferred embodiment, the indicators comprise a plurality of lights, such that when the switch is switched to a first "on" position, one of the indicator lights turns on, indicating a certain status of the room. In addition to or in place of lights, audio signals or an LCD display could be used to indicate different messages desired to be conveyed by the guest or by the hotel staff.

Wagner et al. discloses at column 5, lines 20-24 that in order to control features of the invention, a microprocessor 52 may be provided, for example to control electronic push button/membrane switches, operation of the plurality of lights, including blinking lights, remote switching and actuation, and the security/alarm feature described in Wagner et al.

Thus, Applicant respectfully submits that Wagner et al. discloses that a microprocessor can be used to control features of the system of Wagner et al. such as switches, lights, remote switching and actuation, and security or alarm features. Wagner et al., does not, however, disclose dual or multiple microprocessors. In fact, the Examiner admits in the final Office action at page 3, line 6 that Wagner et al. "does not explicitly show two microprocessors". Moreover, Applicant respectfully submits that Wagner et al. do not disclose, nor suggest, means for conducting electrical signals between said first and second microprocessor. Furthermore, Applicant respectfully submits that Wagner et al. fails to disclose or suggest the Message

Communication Between Microprocessors Feature of claim 26.

Applicant respectfully submits that the inventors Wagner et al., given the limited disclosure of their patent, failed to appreciate the unexpected advantages of the invention defined by claim 26, including enhanced flexibility in the use of microprocessing resources differentially allocated between control functions and conducting signals for signal communication between two microprocessors; and enhanced flexibility, security and reliability of signal communications where signals are being conducted between two microprocessors.

Applicant's invention defined by claim 26 includes first and second microprocessors, each of which control respective features (e.g. first electronic display screen, second electronic display screen, means for selecting a message). Additionally and separately from such control functions, the first and second microprocessors include means for conducting signals between each other. This is in sharp contrast to the system of Wagner et al. where a microprocessor might be used to control switches, lights, remote switching and actuation, and security or alarm features.

The Manual of Patent Examining Procedure (MPEP) provides the following in section 2142:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicant respectfully submits that none of the three basic criteria for establishing a *prima facie* case of obviousness have been met.

In respect of the first criterion, Applicant respectfully submits that Wagner et al. fails to provide any suggestion or motivation to modify the system of Wagner et al. to arrive at the invention

recited in claim 26.

Applicant respectfully submits that the Examiner does not provide in the final Office action that any such suggestion or motivation can be found in Wagner et al. in respect of claim 26. Also, Applicant respectfully submits that even if the system of Wagner et al. were modified to add one or more processor chips to control features of the system such as switches, lights, remote switching and actuation, and security or alarm features, no suggestion or motivation is provided in Wagner et al. to modify the system of Wagner et al. to arrive at the invention of claim 26, including means for conducting electrical signals between said first and second microprocessor.

Applicant respectfully submits that the final Office action fails to point to any suggestion and/or motivation that can be found in Wagner et al., or Wagner et al. in combination with the knowledge generally available to one of ordinary skill in the art, to modify Wagner et al. to arrive at the claimed invention of claim 26.

Thus, Applicant respectfully submits that the first criterion for establishing a *prima facie* case of obviousness has not been met.

In respect of the second criterion, Applicant respectfully submits that the final Office action fails to provide any basis for a reasonable expectation of success at arriving at the claimed invention of claim 26.

Applicant respectfully submits that Wagner et al. discloses that a microprocessor can be used to control features of the invention such as switches, lights, remote switching and actuation, and security or alarm features. Applicant respectfully submits that the disclosure of Wagner et al. is limited to a microprocessor that can be used to perform control functions, including the specific examples of control features cited in Wagner et al. Thus, Applicant respectfully submits that the limited disclosure of Wagner et al. provides no expectation of success at arriving at means for conducting electric signals between said first and second microprocessors, as recited in claim 26. Therefore, Applicant respectfully submits that Wagner et al. fails to provide a basis for a reasonable expectation of success at arriving at the claimed invention of claim 26.

Furthermore, Applicant respectfully submits that the final Office action does not point to any basis in the general knowledge of the person of ordinary skill in the art for a reasonable expectation of success at arriving at the claimed invention of claim 26.

Consequently, Applicant respectfully submits that the final Office action fails to point to any basis that can be found in Wagner et al., or Wagner et al. in combination with the knowledge generally available to one of ordinary skill in the art, for a reasonable expectation of success at arriving at the claimed invention of claim 26.

Thus, Applicant respectfully submits that the second criterion for establishing a *prima facie* case of obviousness has not been met.

In respect of the third criterion, Applicant respectfully submits that the art cited in the final Office action fails to teach or suggest all the claim limitations of claim 26.

Applicant respectfully submits that, while the final Office action refers to column 4, lines 17-44; column 5, lines 1-55; and column 4, lines 4-13 of Wagner in respect of the feature recited in claim 26 of means for conducting electric signals between said first and second microprocessors, such excerpts of Wagner fail to disclose or suggest the feature of means for conducting electric signals between said first and second microprocessors, as recited in claim 26.

Applicant respectfully submits that Wagner et al. discloses that a microprocessor can be used to control features of the system of Wagner et al. such as switches, lights, remote switching and actuation, and security or alarm features. Applicant respectfully submits that the disclosure of Wagner et al. is limited to a microprocessor that can be used to perform control functions, including the specific examples of control features cited in Wagner et al. Thus, Applicant respectfully submits that the limited disclosure of Wagner et al. fails to disclose or suggest means for conducting electric signals between said first and second microprocessors, as recited in claim 26. Therefore, Applicant respectfully submits that Wagner et al. fails to disclose or

suggest all the claim limitations of claim 26.

Furthermore, Applicant respectfully submits that the final Office action does not point to any general knowledge of the person of ordinary skill in the art disclosing or suggesting all the claim limitations of claim 26.

Thus, Applicant respectfully submits that the third criterion for establishing a *prima facie* case of obviousness has not been met.

Consequently, Applicant respectfully submits that the final Office action fails to establish a *prima facie* case of obviousness in respect of claim 26.

Claims 27 and 29 (dependent on claim 26)

Applicant respectfully submits that claims 27 and 29 should each be allowable due to their respective dependencies on claim 26, which has previously been shown to be allowable, and any additional subject matter recited therein.

2. Rejections under 35 U.S.C. 103(a) over Wagner et al. (US 6,236,303) in view of Herz et al. (US20060069749)

Claim 21 (dependent on claim 16)

Applicant respectfully submits that claim 21 should be allowable due to its dependency on claim 16, which has previously been shown to be allowable, and any additional subject matter recited therein.

3. Rejections under 35 U.S.C. 103(a) over Wagner et al. (US 6,236,303) in view of Morris (US6768424)

Claims 22-25 (dependent on claim 16)

Applicant respectfully submits that claims 22-25 should each be allowable due to their respective dependencies on claim 16, which has previously been shown to be allowable, and any additional subject matter recited therein.

Conclusion

The applicant respectfully submits that all pending claims 16-29 of this application are in condition for allowance, and respectfully requests timely allowance thereof.

Respectfully Submitted,
NEXUS LAW GROUP LLP

By 

Otto Zsigmond
Reg. No. 56312
Tel. 604-689-1622

CLAIMS APPENDIX

The following listing of claims replaces all prior versions, and listings, of claims in this application:

Claim 16.(Previously presented) A device for displaying multiple pre-programmed messages, comprising:

- a first housing adapted to be mounted in a first location, a first electronic display mounted in the first housing, a first microprocessor associated with the first housing and being operably connected to the first electronic display for communicating display instructions to the first electronic display to generate a viewable message based on a selected message signal;

- a second housing adapted to be mounted in a second location, a second electronic display mounted in said second housing, a second microprocessor associated with the second housing and having a plurality of programmed message signals, means for conducting electric signals between the first microprocessor and the second microprocessor such that the second microprocessor is operably connected to the first microprocessor for communicating the selected message signal to the first microprocessor, the second microprocessor further being operably connected to the second electronic display for communicating display instructions to the second electronic display to generate a viewable message based on the selected message signal;

- message selection means associated with the second housing and being operably connected to the second microprocessor for enabling a user to select from the plurality of programmed message signals, the second microprocessor communicating the selected message signal to the second electronic display to generate the viewable message and further communicating the selected message signal to the first microprocessor; and

- a source of electricity associated with one of said first or second housings for supplying electric power to the device.

Claim 17.(Previously presented) The device of claim 16 wherein the message selection means

comprises a plurality of buttons, each button being associated with a programmed message signal corresponding to a message to be displayed.

Claim 18.(Previously presented) The device of claim 16 wherein the first and second electronic displays each comprises an LCD display.

Claim 19.(Previously presented) The device of claim 16 wherein said first and second housings are adapted to be secured to opposite sides of a door and the means for conducting electric signals between the first microprocessor and the central second processing unit extends through the door.

Claim 20.(Previously presented) The device of claim 16 wherein said source of electricity comprises a battery mounted in one of said first or second housings.

Claim 21.(Previously presented) The device of claim 16 wherein the first housing includes a motion sensor for sensing motion in the vicinity of the first housing, the motion sensor being operable to turn off the first electronic display in the absence of motion in the vicinity of the first housing to reduce electricity consumption, and to turn on the first display in the presence of motion in the vicinity of the first housing.

Claim 22.(Previously presented) The device of claim 16 wherein said first and second microprocessors are adapted to communicate wirelessly by audio frequency.

Claim 23.(Previously presented) The device of claim 16 wherein said first and second microprocessors are adapted to communicate wirelessly by radio frequency.

Claim 24.(Previously presented) The device of claim 23 wherein the message selection means comprises a plurality of buttons, each button being associated with a programmed message signal corresponding to a message to be displayed.

Claim 25.(Previously presented) The device of claim 23 wherein the first housing includes a

motion sensor for sensing motion in the vicinity of the first housing, the motion sensor being operable to turn off the first electronic display in the absence of motion in the vicinity of the first housing to reduce electricity consumption, and to turn on the first display in the presence of motion in the vicinity of the first housing.

Claim 26.(Previously presented) A device for displaying multiple pre-programmed messages, comprising:

- a first housing adapted to be mounted in a first location;
- a first electronic display screen mounted in said first housing;
- a second housing adapted to be mounted in a second location;
- a second electronic display screen mounted in said second housing;
- a first microprocessor for providing display information to said display screen in said first housing;
- a second microprocessor for providing display information to said display screen in said second housing;
- a power source in one of said first or second housings for supplying electric power to said display screens and said first and second microprocessors;
- means for selecting a message to be displayed on said first and second displays; and
- means for conducting electric signals between said first and second microprocessors.

Claim 27.(Previously presented) The device of claim 26 wherein said first and second display screens each comprises an LCD display.

Claim 28.(Previously presented) The device of claim 26 wherein said first and second housings are adapted to be secured to opposite sides of a door and the means for conducting electric signals between the first microprocessor and the central second processing unit extends through the door.

Claim 29.(Previously presented) The device of claim 26 wherein said first and second microprocessors are adapted to communicate wirelessly by radio frequency.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.